

MOCK TEST PAPER 1

FINAL COURSE GROUP – II

PAPER-6: INFORMATION SYSTEMS CONTROL AND AUDIT

Time Allowed: 3 Hours

Maximum Marks: 100 Marks

Part I: MULTIPLE CHOICE QUESTIONS

Total Marks: 30 Marks

Question Nos. 1 to 5 are based on the case scenario given below, whereas Q. No(s) 6 to 8 are independent questions:

In the year 2014, Mr. Raj Kumar Barula established a shoe manufacturing company named Alora Shoe Private Limited (ASPL) with its two manufacturing units in Sonipat and Surat and Head Office located in Delhi. The company installed water and smoke detectors, air-conditioners and fire extinguishers in its manufacturing units & Head Office to remain protected against any type of failure during disasters.

The mechanism of sale in the company is both offline and online mode. The company has its own mobile app for online mode of sale. Point of Sale (PoS) Systems at various locations all over India on franchise/outsourced/contractual basis are set up with all the business processes being automated and the activities being managed reasonably well. Due to this, in a span of five years; the company in 2019 achieved the turnover of Rs. 200 Crores (approx.) and Net Profit Before Tax (NPBT) of Rs. 60 crores (approx.) during its sales across India.

As another step forward, Mr. Barula, the founder along with other Board members decided to take the company to new heights. The Board members are convinced that a rigorous plan as defined below would enable them to take correct business decisions and propel towards goal of an enlarged business both in India as well as worldwide:

- To tie up with various competent business associates all over India on franchise basis to launch new and unique products.
- To get more insights of its business, procedures are required to be adopted to comprehend customers' needs in better way.
- Detailed analysis of sales of various products.
- To adopt high level Decision Support System (DSS) along with existing Transaction Processing System (TPS) to sustain in competitive market and achieve its objective to grow its business all over India.
- To provide the products at reasonable cost and to attain higher customer satisfaction with 100% quality tested product.

Mr. Barula recently visited Italy and tied up with an Italy-based shoe manufacturing company named CBA Inc. Both companies entered into Memorandum of Understanding (MoU) for another five years to mutually manufacture shoes and launch their products in the market of Asia, Europe and Africa. In the initial stage of operations, ASPL and CBA Inc. agreed upon a relatively low cost business data recovery strategy which involved each company maintaining sufficient capacity to operate counter-part's critical system in case of any disaster.

The company intends to take a suitable insurance for safeguarding of its assets and to avoid unexpected future liabilities due to uninterrupted event or disaster. It also plans to get ISO/IEC 27001 certification. The

company also wishes to use Bar Code mode to define product detail and price for recording and maintaining of stock.

Read the above case scenario carefully and answer the following:

1. ASPL and CBA Inc. mutually agreed to adopt a business recovery strategy with least expenditure of funds due to competitive market conditions in the initial stage of operation. Which of the following business recovery strategy you think is adopted by the company?
 - (a) Hot Site
 - (b) Warm Site
 - (c) Reciprocal Agreement
 - (d) Cold Site
2. ASPL and CBA Inc. jointly have plans to obtain ISO/IEC 27001 certification that uses PDCA cycle describing how to manage information security through a system of information security management. Consider yourself as a member of ISO Certification firm. Following are the activities that you would be performing to execute your task.
 - (i) Update and Improvement of ISMS
 - (ii) Monitoring and Review of ISMS
 - (iii) Establishing the ISMS
 - (iv) Implementing and Working of ISMSIdentify the correct sequence of the activities as defined under PDCA Cycle to perform your task.
 - (a) (ii), (iii), (iv), (i)
 - (b) (i), (ii), (iii), (iv)
 - (c) (iii), (iv), (ii), (i)
 - (d) (iv), (iii), (i), (ii)
3. A Consultant Mr. Sunil advised the management of ASPL Company that existing computer systems are basically Transaction Processing System (TPS) and company needs to adopt high level Decision Support System (DSS). Mr. Sunil highlighted few facts about DSS mentioned below. However, one statement is incorrect regarding DSS. Identify it.
 - (a) Assist managers in solving semi structured problems.
 - (b) Supports the human in decision making process rather than replacing them.
 - (c) Makes decisions in solving complex problems on behalf of the managers.
 - (d) Supports decision making and occurs at all levels of management.
4. ASPL has various types of insurance coverage for safeguarding its assets and to avoid unexpected future liabilities due to uninterrupted event or disaster. These Insurance Coverage falls under which type of a specific risk mitigation strategy?
 - (a) Terminate/Eliminate the Risk
 - (b) Treat/Mitigate the Risk
 - (c) Tolerate/Accept the Risk

- (d) Transfer/Share the Risk
5. The installation of water and smoke detectors, air-conditioners and fire extinguishers in Head Office and manufacturing units of ASPL are done to ensure that _____ controls are well-implemented.
- (a) Environmental
 - (b) Physical
 - (c) Managerial
 - (d) Application
6. ABC is a software development company that uses windows as its operating system. The company got a project to be developed on android operating system for which they need to buy certain new hardware machineries and procure software as well. During the feasibility stage of investigation, certain technical issues were raised. Identify from the following that does not belong to the technical feasibility.
- (a) Can the proposed application be implemented with existing technology?
 - (b) Does the proposed equipment have technical capacity?
 - (c) Does the necessary technology exist to do what is suggested?
 - (d) How will the solution work?
7. Among the wireless platforms, mobile computing has become vital part to the electronic communication. The mobile computing has various security issues for which appropriate controls are required to be well implemented. Which terminology refers to the security concern related to ensuring that only authorized user has access to services?
- (a) Legitimate
 - (b) Integrity
 - (c) Accountability
 - (d) Confidentiality
8. Mr. Sumit, an IS Auditor is hired by AGL Ltd. for its Information System Audit. During the preliminary review, which of the following activity should be considered by him while reviewing the systems under Legal consideration and audit standards?
- (a) Analysis of business processes and level of automation.
 - (b) Nature of Business, its products and services.
 - (c) The statutes or regulatory framework may impose stipulations as regards minimum set of control objectives to be achieved by subject organization.
 - (d) Assess the possibility of potential vulnerability, including the experience of past periods or frauds.

(8 x 2 = 16 Marks)

Question Nos. 9 to 22 carries 1 mark each.

9. Following are the statements on Corporate and Business Governance:
- (i) Business Governance is pro-active in its approach and takes a forward-looking view.
 - (ii) Corporate Governance refers to the structure and processes for the direction and control of the companies.

- (iii) Business Governance focuses on strategy and value creation with objective of helping the board to make strategic decisions.
- (iv) Corporate Governance drives the corporate information needs to meet personal objectives of stakeholder.

Choose the set of correct statements from above mentioned:

- (a) (ii), (iii) and (iv)
 - (b) (i), (ii) and (iii)
 - (c) (i) and (ii)
 - (d) (ii) and (iii)
10. ABC Ltd., a portfolio management company recently bought a new software from renowned software Development Company in Delhi NCR named JN solutions Ltd. The purpose of this software is to help the management of ABC Ltd. to take decision related to investment for its clients, how much the clients can invest, and also the preference of specific type of security to the clients. Identify the type of Information System which the said software represents.
- (a) Transaction Processing system
 - (b) Expert System
 - (c) Office Automation system
 - (d) Knowledge Management System
11. In a computer network, Mr. Ramesh with mala fied intentions intercepts an authorized telecommunication link between Ms. Sangeeta and Mr. Kamal, two senior managers of PQR Ltd. company. He modifies the message of Mr. Kamal by adding few lines in the message and forward it to Mr. Sangeeta to harm his reputation. This is an example of which type of telecommunication attack?
- (a) Wire tapping
 - (b) Piggybacking
 - (c) Denial of service
 - (d) Subversive Threats
12. Business Continuity Management System (BCMS) is a system that establishes, implements, operates, monitors, reviews, maintains and improves business continuity. Which of the following document is not classified as being part of the Business Continuity Management System?
- (a) Local Authority Risk Register
 - (b) The Business Impact Analysis report
 - (c) Incident Log
 - (d) Review Report
13. In SDLC, the feasibility study of a system under Preliminary Investigation phase is evaluated under various dimensions like – Technical, Economic, Legal etc. Identify the question from following not considered relevant during Economic Feasibility review.
- (a) The cost of conducting a full system investigation.
 - (b) The cost of hardware and software for class of applications being considered.
 - (c) The benefits in the form of reduced costs or fewer costly errors.
 - (d) The cost of expansion, if developed.

14. Nagrik Dursanchar Nigham Ltd. (NDNL) has the policy to provide 30% discount on monthly basic rentals to its Senior Citizen Customers on the submission of their Life Certificate at the start of each year. Certain instances are found every year where discount is provided without obtaining such certificate. During the Concurrent Audit, the IS Auditors of NDNL observed something suspicious in it, hence they used an Audit Technique in the host application systems of NDNL and started monitoring the system's transactions. This resulted in marking of the transactions where discounts were provided but Life Certificate were not obtained, immediately on their occurrence. Identify the type of Audit Technique used in this case.
- (a) System Control Audit Review File (SCARF)
 - (b) Audit Hooks
 - (c) Integrated Test Facility (ITF)
 - (d) Snapshots
15. Mr. Kamal is an IT head of a company that handles sensitive personal data of its clients in its owned computer systems. Mr. Kamal intentionally shared the data of Mr. X that apprehended personal loss/damage to Mr. X. Under which section of the Information Technology Act, 2000; Mr. X can take action against the Company?
- (a) Section 7A
 - (b) Section 43A
 - (c) Section 66A
 - (d) Section 67A
16. Purchaseonchoice is an online shopping portal that provides a platform to various vendors to sell their products. The company categorized its dealers in two categories, one is manufacturer and other is seller/retailer. As the company cannot afford to have independent cloud, the company hires a third party KM Service Provider that provides a relatively lesser secure cloud to Purchaseonchoice to store data of these categorized people on pay-per usage basis. Which type of cloud is provided by KM Service Provider to be used by Purchaseonchoice?
- (a) Private Cloud
 - (b) Public Cloud
 - (c) Hybrid Cloud
 - (d) Community Cloud
17. A mobile manufacturer company launches ZIA as its new mobile phone which is very simple to use with 36 hours battery backup. Though during laboratory tests, ZIA's battery was tested for its robustness and low probability of failure. The company decides to offer a free replacement in case the battery of the mobile phone fails. The company decides to leverage this as a marketing strategy to sell its product and that turned out to be an enormous success. Which type of risk management strategy the company adopted in this case?
- (a) Terminate the risk
 - (b) Transfer the risk
 - (c) Tolerate the risk
 - (d) Treat the risk
18. To gain better understanding about Information Systems, they are classified into various categories, each being based in specific parameters. In this context, identify the incorrect statement.

- (a) A clock is a perfect example of closed system.
 - (b) A software that performs set of instructions is an example of deterministic system.
 - (c) Tax calculator is a physical system.
 - (d) Inventory system is a probabilistic system.
19. DEF Pvt. Ltd. has its manufacturing and operational unit in rural area of Uttar Pradesh, India where frequent power cuts happen. Due to this, the systems in the unit remained unutilized for great amount of time leading to disrupted and lagged information. To overcome this problem and maintaining inventory records up-to-date, the company installed Uninterrupted Power Supply (UPS) for its systems. The preventive measure to install UPS to have seamless flow of information comes under which Information System control?
- (a) Logical Access Control
 - (b) Environmental Control
 - (c) Compensatory Control
 - (d) Detective Control
20. CKP Travel and Tourism company has its head office in Gujarat state, East of Mandvi District with its main servers and mainframe systems installed here. Recently, there was a mild earthquake in the West of Mandvi district that led to disruption in its operational services to its clients. With no other backup facility available, the company could resume its operation of services in sometime leading to financial loss and its goodwill in the market. This episode prompted the management of CKP to have its backup facility as the company cannot tolerate any downtime and fast recovery is critical in order to resume its operations. Suggest an appropriate backup site that CKP Travel and Tourism can use.
- (a) Hot Site
 - (b) Cold Site
 - (c) Warm Site
 - (d) Reciprocal Arrangement
21. DEF Ltd. the manufacturer of hand creams and lotions having two branches in Noida, UP. The company bought new software for attendance of its employees and installed it in one of its branches with strategy if it is successful then it may implement to other modules of Human Resource and another branch also. Which system change-over strategy is being used by DEF Ltd.?
- (a) Direct Implementation
 - (b) Phased change-over
 - (c) Pilot change-over
 - (d) Parallel change-over
22. Ms. Ruby is hired by ABC Ltd. as an IS Auditor to audit the information systems of company to ensure that the controls are in place on the client, server and on the network connecting the clients and servers. To gather the evidence; she interviewed the staff and managers, reviewed and observed various processes. Identify the step of IS audit process under which she performed this activity?
- (a) Scoping
 - (b) Analysis
 - (c) Fieldwork
 - (d) Planning

(14 x 1 = 14 Marks)

Part II: DESCRIPTIVE QUESTIONS

Total Marks: 70 Marks

Question No. 1 is compulsory.

Attempt any four questions out of remaining five questions.

1. (a) In an enterprise, IT strategy planning refers to planning undertaken by the top management towards meeting its long-term objectives. To achieve so, IT strategy planning is classified into four categories. Discuss them. **(6 Marks)**
(b) In IT based systems, Operating System is the computer's central program that performs major tasks like job scheduling, managing hardware and software resources, multitasking and multiuser resource sharing etc. As an IT administrator, suggest various Operating System Access controls that may help in protecting the operating system installed in systems **(5 Marks)**
(c) Explain the term Control Risks. **(3 Marks)**
2. (a) 'Audit Trail' is a term significant for auditors while performing auditing assignment in any enterprise. Explain the term Audit Trail and its importance in auditing. Discuss the Audit Trail under Data Resource Management Control and Quality Assurance Controls. **(6 Marks)**
(b) Business Continuity Planning (BCP) is a logistical plan for how an enterprise will recover and restore partially or completely when interrupted. However, the plan has to be tested properly before its implementation in an organization. Elaborate various aspects related to BCP testing. **(5 Marks)**
(c) ABC Ltd. has information system controls that are designed to identify the error or malicious act that occur and report the occurrence. Identify the control being implemented by the company and describe its characteristics. **(3 Marks)**
3. (a) One of the criteria to categorize information required in an enterprise is based on its requirement by the top, middle and lower-level management. Discuss these categories. **(6 Marks)**
(b) Various types of continuous Audit techniques are used by the auditors to test and detect the data so that the impact thereof would be the least. However, these techniques have their own advantages as well as limitations. Discuss them. **(5 Marks)**
(c) Define the following technological terms as defined under IT Act, 2000.
(i) Computer Network
(ii) Intermediary **(3 Marks)**
4. (a) Cloud Computing has become a rapidly evolving technology in today's world. However, in spite of its many benefits, it has many security and implementation issues. Discuss the major security issues related to Cloud Computing. **(6 Marks)**
(b) Data Integrity Controls are to be well placed in an organization as these are the reflection of accuracy, correctness, validity and currency of the data. Discuss the threats and their corresponding control mechanisms associated with each category of Data Integrity Control. **(5 Marks)**
(c) In context of Business Continuity Management in an enterprise, various kinds of plans are used out of which Recovery Plan is one such plan. Discuss its concept. **(3 Marks)**

5. (a) In a situation wherein it is anticipated that sovereignty and integrity of India may be compromised; under which section of IT Act, 2000 can the Central Government of India issue directions for blocking the public access of any information through any computer resource. Identify the section and elaborate it further. **(6 Marks)**
- (b) As compared to traditional audit, evidence collection has become more challenging with the use of the computers to the auditors. What are the issues which affect evidence collection and understanding the reliability of controls in financial audit? **(5 Marks)**
- (c) In ABC Ltd., a new system is to be implemented which may involve various activities like equipment installation and system change-over strategies. Discuss various system change-over strategies. **(3 Marks)**
6. (a) During Systems Development Life Cycle, Preliminary Investigation is the first step that determines the strategic feasibility of the system and ensure that the solution fits the business strategy. The steps involved in the process are identification of the problem, identification of objectives, delineation of scope and feasibility study. Discuss the activity related to Identification of Problem. **(6 Marks)**
- (b) In an enterprise, one of the major activities involved in risk management process relates to the identification of sources of risk so that appropriate risk mitigation strategies can be adopted. To understand this process, various other concepts need to be comprehended. Elaborate the following terms related to risk:
- (i) Asset
 - (ii) Threat
 - (iii) Vulnerability **(5 Marks)**
- (c) Identify the Section of Information Technology Act, 2000 that describes the 'Punishment for Disclosure of information in breach of lawful contract'. Describe the Section also. **(3 Marks)**